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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,286	11/30/2001	Eric Aerts	9971-005	2124
20583	7590	12/13/2006	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			TORRES VELAZQUEZ, NORCA LIZ	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,286

Applicant(s)

AERTS, ERIC

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 10-12, 14-31 and 33-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-12, 14-31 and 33-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The Declaration under 37 CFR 1.132 filed September 22, 2006 is insufficient to overcome the rejection of independent claims 1 and 27 based upon the 35 U.S.C. 103(s) over SMITH et al. ('462) in view of BATTREALL ('523) as set forth in the last Office action because: the facts presented are not germane to the rejection at issue.

The Declaration presents facts directed to the Haigh (US 3,657,060) reference which was previously withdrawn in view of Applicant's amendment to the claims in which they narrowed the range of the thickness of the polyurethane adhesive. The Office Action mailed 06/22/2006 indicated that while the Specification provides support for the narrower range "of more than 0.5 mils and less than about 4 mils", as one of the preferred embodiments of their invention, Applicants have failed to show that such range is critical as to provide unexpected results when such a narrow range of adhesive is used. The BATTREALL reference teaches that the amount of adhesive in a similar application to that of the present invention will vary depending on the physical characteristics of the material to be bonded. The Examiner concluded that the thickness of the adhesive film is recognized as a result effective variable and that the discovery of optimum values would have involved only routine experimentation. It is further noted determination of optimum values of cause effective variables such as thickness is within the skill of one practicing the art. In re Boesch, 205 USPQ 215 (CCPA 1980).

It is further noted that to establish unexpected results over a claimed range, applicants should compare a sufficient number of tests both inside and outside the claimed range to show the criticality of the claimed range. In re Hill, 284 F.2d 955, 128 USPQ 197 (CCPA 1960).

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. **Claims 1-7, 10-12, 27 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH et al. (US 5,447,462) in view of BATTREALL (US 5,234,523) as stated in previous action.**

Smith is concerned with the creation of a laminated fabric used in the construction of a brassiere. Smith teaches two fabrics laminated together by an open net-like film of heat sensitive adhesive. (Abstract) The fabrics are laminated by using heat and pressure. (Refer to Column 9) The reference teaches the fabric to have a cup. (Figure 13). Smith teaches applicant's claimed openings. (Figure 11) Smith further teaches the use of additional layers laminated in the same manner as the first two layers (Col. 5, lines 18-25). The reference further teaches the fabrics to be elastic and woven. (Col. 5, lines 24-34)

The Smith reference provides the fabric laminate structure of claim 1 that comprises a first fabric, a second fabric and a heat sensitive adhesive layer in between. However, it fails to teach a film that comprises polyurethane.

BATTREALL discloses a process for laminating a layer of material to a substrate used of contoured products. (Col. 1, lines 8-13) The reference teaches laminating a substrate (made from materials such as cotton), to a gas permeable layer (knitted or woven material) by means of an adhesive layer. The adhesive may be in the form of a liquid, a powder, a film or a web, and may be applied to the substrate surface in any of the conventional methods for doing so. The reference discloses the use of heat-activated adhesives such as polyolefins, polyesters,

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polyurethane, etc. (Col. 2, lines 14-55) With regards to the thickness of the adhesive layer, it is noted that the BATTREALL reference discloses that the amounts of adhesive will vary depending on the physical characteristics of the material to be bonded. (Col. 2, lines 49-52

Applicant's have failed to show the criticality for the claimed range for the thickness of the polyurethane adhesive layer to their invention. The range of more than about 0.5 mils and less than about 4 mils is disclosed as one of the *preferred* ranges for ether-based polyurethane film adhesive but the specification fails to show evidence that the claimed polyurethane adhesive layer thickness is critical. BATTREALL teaches above that the amount of adhesive will vary depending on the physical characteristics of the material to be bonded. Therefore, the thickness of the adhesive film is recognized herein as a result effective variable in this field of endeavor and it has been held that discovering optimum values would have been or result effective variables involves only routine experimentation. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

Since both SMITH and BATTRELL et al. are directed to laminates, the purpose disclosed by BATTRELL et al. would have been recognized in the pertinent art of SMITH.

SMITH discloses the claimed invention except that it uses a polyamide heat sensitive web of an open net-like film instead of a polyurethane heat sensitive adhesive film, BATTRELL shows that polyurethane film is an equivalent structure known in the art. Therefore, because these two references were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a polyamide web of an open net-like film for a polyurethane film.

It is the examiner's position that the laminate from the combination of SMITH and BATTREALL is identical to or only slightly different than the laminate claimed prepared by the method of the claim(s), because both laminates are formed by two layers of fabric bonded by a polyurethane film adhesive in between. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). The SMITH in view of BATTRELL either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the prior art applied herein.

4. **Claims 14-24 and 35-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH et al. (US 5,447,462) and BATTREALL (US 5,234,523) and further evidenced by RUDY (US 5,042,176).**

While BATTREALL is silent to the type of polyurethane material used, the use of an ether-based polyurethane film would have been obvious since this type of material is known for its hydrolysis stability as evidenced by RUDY (Col. 13, lines 24-52) and one having ordinary

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skill in the art of polyurethane film materials would use an ether-based polyurethane film in the production of materials that are highly exposed to water and moisture motivated by the desire of producing a material that is stable in water and moisture environments.

**5. Claim 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and BATTREALL as applied above, and further in view of Kollmanthaler et al. (US 5,967,876).**

Smith fails to teach the use of an insert wire. Kollmanthaler is concerned with the creation of a brassiere. Kollmanthaler teaches the use of an insert wire. (Abstract) It would have been obvious to a person having ordinary skill in the art to utilize an insert wire in the bra of Smith. Such a combination would have been motivated by the desire to provide further support to the wearer of the garment, for example, the use of insert wires will be useful in enhancing the support the brassiere for a wearer with full figure. It is the Examiner's position that the use of an insert wire to provide an enhanced support would be recognized in the art of Smith.

**6. Claims 28-31 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and BATTREALL as applied above, and further in view of Tedeschi et al. (US 5,984,762).**

Smith teaches the use of a strap but fails to teach cushioning said strap. Tedeschi is concerned with the creation of a bra strap. Tedeschi teaches applicant's claimed cushioning layers. (Abstract).

With respect to the process limitations of prelaminating the adhesive, it is the Examiner's it is the examiner's position that the laminate fabric and brassiere created by the combination of

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Smith and Tedeschi is identical to or only slightly different than the presently claimed laminate and brassiere prepared by the method of the claim(s), because both structures have a first fabric laminated to a second fabric by an adhesive in between. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.




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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Norca L. Torres-Velazquez  
Primary Examiner  
Art Unit 1771

12/7/2006